




ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of Invention	Combinatorial Selection of Phosphorothioate single stranded DNA aptamers for TGF-beta-1 protein																																																																																																													
<p>Application Number: 10/828934 </p> <p>Confirmation Number: 5106</p> <p>First Named Applicant: David Gorenstein</p> <p>Attorney Docket Number: UTMB:1022</p> <p>Art Unit: 1653</p> <p>Search string: (5218088 or 5397698 or 5459015 or 5576302 or 5587361 or 5599797 or 5602000 or 5607923 or 5620963 or 5635488 or 5639868 or 5639873 or 5660985 or 5661134 or 5668264 or 5674685 or 5705337 or 5723594 or 5731144 or 5731424 or 5734041 or 5763595 or 5795721 or 5804445 or 5811533 or 5849479 or 5852984 or 5859228 or 5874219 or 6124449 or 6168778 or 6177557 or 6208816 or 6242246 or 6458543 or 6503715 or 6544776 or 6423493 or 20030162216).pn.</p> <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>ADS</td><td>1</td><td>5218088</td><td>1993-06-08</td><td>Gorenstein</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>2</td><td>5397698</td><td>1995-03-14</td><td>Goodman</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>3</td><td>5459015</td><td>1995-10-17</td><td>Janjic</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>4</td><td>5576302</td><td>1996-11-19</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>5</td><td>5587361</td><td>1996-12-24</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>6</td><td>5599797</td><td>1997-02-04</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>7</td><td>5602000</td><td>1997-02-11</td><td>Hyman</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>8</td><td>5607923</td><td>1997-03-04</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>9</td><td>5620963</td><td>1997-04-15</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>10</td><td>5635488</td><td>1997-06-03</td><td>Cook</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>11</td><td>5639868</td><td>1997-06-17</td><td>Janjic</td><td></td><td></td><td></td></tr><tr><td>ADS</td><td>12</td><td>5639873</td><td>1997-06-17</td><td>Barascut</td><td></td><td></td><td></td></tr></tbody></table>							init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	ADS	1	5218088	1993-06-08	Gorenstein				ADS	2	5397698	1995-03-14	Goodman				ADS	3	5459015	1995-10-17	Janjic				ADS	4	5576302	1996-11-19	Cook				ADS	5	5587361	1996-12-24	Cook				ADS	6	5599797	1997-02-04	Cook				ADS	7	5602000	1997-02-11	Hyman				ADS	8	5607923	1997-03-04	Cook				ADS	9	5620963	1997-04-15	Cook				ADS	10	5635488	1997-06-03	Cook				ADS	11	5639868	1997-06-17	Janjic				ADS	12	5639873	1997-06-17	Barascut			
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass																																																																																																							
ADS	1	5218088	1993-06-08	Gorenstein																																																																																																										
ADS	2	5397698	1995-03-14	Goodman																																																																																																										
ADS	3	5459015	1995-10-17	Janjic																																																																																																										
ADS	4	5576302	1996-11-19	Cook																																																																																																										
ADS	5	5587361	1996-12-24	Cook																																																																																																										
ADS	6	5599797	1997-02-04	Cook																																																																																																										
ADS	7	5602000	1997-02-11	Hyman																																																																																																										
ADS	8	5607923	1997-03-04	Cook																																																																																																										
ADS	9	5620963	1997-04-15	Cook																																																																																																										
ADS	10	5635488	1997-06-03	Cook																																																																																																										
ADS	11	5639868	1997-06-17	Janjic																																																																																																										
ADS	12	5639873	1997-06-17	Barascut																																																																																																										

ADS	13	5660985	1997-08-26	Pieken
ADS	14	5661134	1997-08-26	Cook
ADS	15	5668264	1997-09-16	Janjic
ADS	16	5674685	1997-10-07	Janjic
ADS	17	5705337	1998-01-06	Gold
ADS	18	5723594	1998-03-03	Janjic
ADS	19	5731144	1998-03-24	Toothman
ADS	20	5731424	1998-03-24	Toothman
ADS	21	5734041	1998-03-31	Just
ADS	22	5763595	1998-06-09	Gold
ADS	23	5795721	1998-08-18	Rabin
ADS	24	5804445	1998-09-08	Brasier
ADS	25	5811533	1998-09-22	Gold
ADS	26	5849479	1998-12-15	Janjic
ADS	27	5852984	1998-12-29	Davis
ADS	28	5859228	1999-01-12	Janjic
ADS	29	5874219	1999-02-23	Rava
ADS	30	6124449	2000-09-26	Gold
ADS	31	6168778	2001-01-02	Janjic
ADS	32	6177557	2001-01-23	Janjic
ADS	33	6208816	2001-03-27	Koizumi
ADS	34	6242246	2001-06-05	Gold
ADS	35	6458543	2001-10-01	Gold
ADS	36	6503715	2003-01-07	Gold
ADS	37	6544776	2003-04-08	Gold
ADS	38	6423493	2002-07-23	Gorenstein

US Published Applications

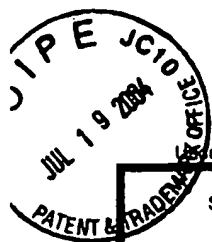
Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
ADS	1	20030162216	2003-08-28	Gold			

Signature /Amber Steele/

03/09/2007

Examiner Name	Date
---------------	------



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete If Known			
		Application Number	10/828,934		
		Filing Date	04/21/2004		
		First Named Inventor	Gorenstein et al.		
		Art Unit			
		Examiner Name			
Sheet	1	of	2	Attorney Docket Number	UTMB:1022

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO 00 47774 A1	08/17/2000	Janjic, et al.		
ADS		WO 92 14842 A	09/03/1992	Toole, et al.		
ADS		WO 92 14843	09/03/1992	Toole, et al.		
ADS		WO 93 08296 A	04/29/1993	Hoke, et al.		
ADS		WO 95 21583	08/17/1995	Skeppmark, et al.		
ADS		WO 96 19572 A	06/27/1996	Hybridon		
ADS		WO 96 41019 A1	08/17/2000	Janjic, et al.		
ADS		WO 98 18480	05/07/1998	Janjic, et al.		
ADS		WO 99 31275	06/24/1999	Gold, et al.		
ADS		WO 01 09156	02/08/2001	Pagratis, et al.		
ADS		WO 01 091561 A2	12/06/2001	Zimmerman, et al.		
ADS		WO 01 09159	02/08/2001	Ruckman, et al.		

Examiner Signature	/Amber Steele/	Date Considered	03/09/2007
-----------------------	----------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/828,934
				Filing Date	04/21/2004
				First Named Inventor	Gorenstein et al.
				Art Unit	
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	UTMB:1022

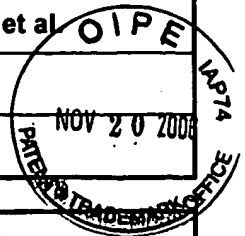
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
ADS		ANTSPOVICH, ET AL. (1998) Cross-linked DNA duplexes: Exonuclease stability and interaction with the nucleic transcription factor of the κ light-chain enhancer (NF- κ B).	
ADS		BIELINSKA, ET AL. (1990) Regulation of Gene Expression with Double-Stranded Phosphorothioate Oligonucleotides, <i>Science</i> , Vol. 250, pg. 997-1000.	
ADS		KHALED, ET AL. (1998) Use of Phosphorothioate-Modified Oligodeoxynucleotides to inhibit NF- κ B Expression and Lymphocyte Function, <i>Clinical Immunology and Immunopathology</i> , Vol. 86, No. 2, pp. 170-179.	
ADS		KING, ET AL., (1998) Novel Combinatorial Selection of Phosphorothioate Oligonucleotide Aptamers. <i>Biochemistry</i> , 37, 16489-16493.	
ADS		KUNSCH, ET AL. (1992) Selection of Optimal κ B/Rel DNA-Binding Motifs: Interaction of Both Subunits of NF- κ B with DNA is Required for Transcriptional Activation, <i>Molecular and Cellular Biology</i> , October 1992, Vol. 12, No. 10, p. 4412-4421.	
ADS		LEBRUSKA, ET AL. (1999) Selection and Characterization of an RNA Decoy for Transcription Factor NF- κ B ⁺ , <i>Biochemistry</i> , 38, 3168-3174.	
ADS		MORISHITA, ET AL. (1997) In vivo transfection of cis element "decoy" against nuclear factor- κ B binding site prevents myocardial infarction, <i>Nature Medicine</i> , Vol. 3, No. 8, p. 894-899.	
ADS		NAKAMAYE, ET AL. (1988) Direct sequencing of polymerase chain reaction amplified DNA fragments through the incorporation of deoxynucleoside α -thiotriphosphates, <i>Nucleic Acids Research</i> , Vol. 16, No. 21.	
ADS		SHARMA, ET AL. (1996) Transcription Factor Decoy Approach to Decipher the Role of NF- κ B in Oncogenesis, <i>Anticancer Research</i> , 16:61-70.	
ADS		STEC, ET AL. (1997) Deoxyribonucleoside 3'-O-(2-Thio- and 2-Oxo-"spiro"-4,4-pentamethylene-1,3,2-oxathiaphospholane)s: Monomers for Stereocontrolled Synthesis of Oligo(deoxyribonucleoside phosphorothioate)s and Chimeric PS/PO Oligonucleotides ⁵ , <i>J. Am. Chem. Soc.</i> , 120, 7156-7167.	
ADS		UHLMANN, ET AL. (1997) Studies on the Mechanism of Stabilization of Partially Phosphorothioated Oligonucleotides Against Nucleolytic Degradation, <i>Antisense & nucleic Acid Drug Development</i> , 7:345-350.	
ADS		ZON, GERALD (1988) Oligonucleotide Analogues as Potential Chemotherapeutic Agents. <i>Pharmaceutical Research</i> , Vol. 5, No. 9, pp. 539-549.	

Examiner Signature	/Amber Steele/	Date Considered	03/09/2007
--------------------	----------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
 Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached.
 This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Substitute for form 1449A/PTO (modified) 2nd SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 1 of 1	Application Number	10/828,934
	Filing Date	04/21/2004
	First Named Inventor	Gorenstein, et al.
	Art Unit	1653
	Attorney Docket Number	UTMB:1022



Exam. Init.*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Doc. Number-(Kind Code if Known)		
ADS	A40	US- 5,844,106 A	12-01-1998	SEELA, et al.
ADS	A41	US- 6,171,792 B1	01-09-2001	BRENT, et al.
ADS	A42	US- 2003/0186906 A1	10-02-2003	SCHLINGENSIEPEN, et al.

Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation (Check if yes)
		Ctry. Code	Number-KindCode (if known)			
	B13					

OTHER DOCUMENTS			
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation (Check if yes)
ADS	C13	PCT International Search Report and Written Opinion of the International Searching Authority, PCT/us05/13548, 05 May 2006	

*Examiner: /Amber Steele/	Date Considered: 03/09/2007
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Information Disclosure Statement)